

## **Decision Record**

### **Lone Tree Mine Expansion – Brooks Project**

**DOI-BLM-NV-W010-2014-0034-EA**

#### **Introduction**

The Lone Tree Mine initiated mine-related excavation on private land in 1990 with a planned mine life of nine years. In 1993, Santa Fe Pacific Gold (now Newmont Mining Corporation) submitted a plan of operations (POO) to BLM to expand onto public lands. The Record of Decision (ROD) for the *Final Environmental Impact Statement, Lone Tree Mine* (Lone Tree EIS), was signed on October 15, 1996. The Lone Tree EIS analyzed the impacts associated with expanding mining operations, including an open pit, waste rock storage facilities, haul roads, laydown areas, and more, onto public and private lands, extending mine life by approximately seven years to 2006. After 2006, the Lone Tree Mine entered into care and maintenance with residual heap leach processing. In 2011, Newmont Mining Corporation (Newmont) began a heap leach reprocessing project to improve recovery results.

Newmont now proposes to expand their existing operations at the Lone Tree Mine to include the Brooks project. The Brooks project includes construction, operation, reclamation, and closing of an open-pit surface oxide resource located approximately 1.5 miles southwest from the existing Lone Tree Mine heap leach pad. The project includes modifying the POO boundary to include approximately 792 acres. The existing heap leach pad and ancillary support facilities at Lone Tree Mine would be used within their currently permitted capacities. The proposed Project would include the following major components:

- One open pit (the “Brooks Pit”);
- Three Overburden/Interburden Storage Areas (OISA);
- Exploration;
- Laydown areas;
- Relocation of an existing lime silo;
- Installation of an expanded perimeter fence;
- Storm water diversion ditches and storm water sediment basins; and
- Haul roads and access roads.

Newmont proposes to mine approximately 2.3 million tons of heap leach ore and 8.2 million tons of waste rock for the Brooks project (total of 10.5 million tons). The material (both ore and waste) would be extracted from the Brooks Pit using conventional open pit mining methods of drilling, blasting, loading, and hauling. Newmont would use hydraulic shovels or front end loaders to load the blasted ore and waste into the haul trucks. The haul trucks would transport the waste rock to three surface-deposited OISAs near the Brooks Pit, and transport the run-of-mine ore to the existing and permitted Lone Tree Mine heap leach pad via a new heap leach pad access ramp. Once placed on the

heap leach pad, the ore would be leached with a dilute cyanide solution to dissolve the precious metals into a “pregnant” leach solution. The pregnant solution would then be processed for metal recovery and further refining. Total surface disturbance would be approximately 230 acres (32 acres for open pit, 110 acres for waste rock storage, 56 acres for haul roads, 11 acres for laydown areas, 10 acres for exploration, and 10 acres for storm water diversion ditches).

Following BLM and NDEP approval, operations would likely begin in early 2015. Stripping of overburden is expected to take approximately 1-2 months, after which production would begin. Mining is expected to be completed in early 2018, and leaching should be completed in early 2021. Reclamation, post-closure monitoring, and other closure activities would continue for approximately three additional years.

The majority of surface disturbance would occur within T34N, R42E, section 28, with additional disturbance from the access road occurring in sections 21 and 22.

The project expects to employ approximately 50 people during stripping and production activities. Newmont anticipates the work schedule would be 10 hours per day, 4 days per week, 52 weeks per year for production activities. Ore processing would occur 24 hours per day, 365 days per year.

## **DECISION**

On the basis of the information contained in the EA and the enclosed Finding of No Significant Impact (FONSI), it is my decision to implement the Proposed Action, subject to the existing mitigation measures at the Lone Tree Mine, the environmental protection measures committed to by the operator, and the new stipulations provided below that are based on recommended mitigation measures developed in the EA.

The mitigation for Special Status Plants has been modified from the mitigation recommended in the EA to consider project-specific circumstances that extend beyond the NEPA analysis, including previous expectations, project schedule, and operational considerations. Specifically, the need for special status plant surveys was established through the NEPA analysis, but was identified after the necessary survey windows had passed. Therefore, a phased approach is brought forward for the Special Status Plants stipulation to allow for partial construction to begin. Any authorization of the Proposed Action is subject to implementation of the following stipulations:

### Special Status Plants

The operator shall prevent disturbance to Areas 4, 5, and 6 of the West and Northwest Overburden/Interburden Storage Areas (OISA) with known potential habitat for Margaret rushy milkvetch until a special status plant survey can be performed. Areas 4, 5, and 6 are depicted on Figure 14 of the EA. Additionally, no exploration disturbance will be authorized in potential habitat for Margaret rushy milkvetch until a special status plant survey can be performed. Of the three OISAs proposed, two contain potential habitat for the Margaret rushy milkvetch. The proposed West and Northwest OISAs and their

access routes include 42 acres of potential habitat, comprising 44 percent of these facilities.

The plant survey of the West and Northwest OISAs (Areas 4, 5, and 6) shall be conducted by a qualified botanist for Margaret rushy milkvetch during its flowering period (May – June). If special status plant species are present, they shall be avoided by a buffer of 50 feet and the operator shall collect seeds and/or transplant special status plant species outside of disturbance areas in coordination with BLM. Collected seeds shall be stored in a seed bank and germinated for eventual planting. If a transplant location is not determined prior to the completion of this analysis, the prospective transplant location would be evaluated under NEPA once an appropriate location has been identified.

Approximately three acres of potential Margaret rushy milkvetch habitat occur along the proposed haul road in Areas 1, 2, and 3. The haul road would be necessary for site preparation and development of the proposed facilities. In the event the haul road needs to be constructed before the flowering period for Margaret rushy milkvetch, special status plant surveys would not be required on the potential habitat located in Areas 1, 2, and 3, as depicted on Figure 14 of the EA. This would ensure that site preparation and development is not unreasonably hindered. The disturbance of approximately three acres of potential Margaret rushy milkvetch habitat would represent a loss of 1.8 percent of the total habitat available in the Project Area. If the haul road is not needed prior to the flowering period, surveys shall be conducted as described for Areas 4, 5, and 6.

#### Sensitive Small Mammals

Seven to ten days prior to vegetation removing activities (including exploration), vegetation in proposed disturbance areas shall be mowed to a height of eight to twelve inches above ground to create less desirable habitat conditions and to encourage wildlife species, including the pygmy rabbit, dark kangaroo mouse, and Preble's shrew, to vacate the disturbance areas, thus reducing the risk of mortality to these species. Areas where vegetation is naturally less than 12 inches may be excluded from this requirement with approval from the authorized officer, based on field verification from BLM staff. Mowing in potential special status plant habitat shall not occur prior to completion of special status plant surveys, as described in the special status plant stipulation.

If mowing occurs during the migratory bird breeding season (March 1 – August 31), a migratory bird clearance survey (including burrowing owls) will be required prior to mowing as outlined in the Operational and Performance Standards and Environmental Protection Measures section in chapter 2.5.12 of the EA. Mowing after the migratory bird clearance survey, and within seven to ten days prior to surface disturbance, will allow the applicant to conduct necessary bird clearance surveys and may also allow pygmy rabbit, dark kangaroo mouse, and Preble's shrew to relocate outside of the disturbance areas.

If mowing occurs outside of the migratory bird breeding season (September 1 – February 28), a western burrowing owl clearance survey will be required, as described in the burrowing owl stipulation.

### Western Burrowing Owl

To avoid potential impacts to burrowing owls, a burrowing owl survey shall be conducted by a qualified biologist prior to ground disturbance, any time of the year due to some burrowing owls being year-round residents that do not migrate. Surveys must be conducted no more than 10 days and no less than 3 days prior to initiation of disturbance. Surveys must follow established BLM standards and protocols, and should be approved by the BLM prior to being implemented. If active burrows are located, the BLM must be notified immediately and a buffer of 500 meters, or line of sight (the lesser of the two), shall be placed around the burrowing owl's burrow until it vacates its burrow. If active burrows are located during the breeding season (March 1 – August 31), the active burrow shall not be disturbed until after the breeding season or the burrow is no longer active. If active burrows are located during the non-breeding season, a one-way door shall be installed in burrow openings to permanently exclude burrowing owls and close burrows after verifying burrows are empty based on site monitoring by a qualified biologist.

Do not harass or evict the burrowing owl out of the burrow, but wait until it vacates the burrow on its own and then implement the closing of the burrow openings. If a burrow needs to be permanently closed, create one passive relocation site/artificial burrow for every active burrow closed, in coordination with the BLM. Artificial burrows shall be located in the nearest suitable habitat within the Project Area, but outside of the disturbance area, to encourage the burrowing owls to use the artificial burrows. This would reduce the risk of burrowing owl mortality from the surface disturbing activities from the Proposed Action. If no active burrows are present in the area surveyed, implementation of the project shall commence within 10 days of survey completion in order to avoid the need for a subsequent burrowing owl survey.

### **Rationale**

The selection of the Proposed Action is based on factors including, but not limited to:

- Authority for this action as it relates to the BLM-managed public lands is contained in the general Mining Law of 1872 (30 U.S.C. §§ 22-42), as amended; the Federal Land Policy and Management Act of 1976 (43 U.S.C. §§ 1701), as amended; the Code of Federal Regulations at 43 CFR 3809; the Code of Federal Regulations at 43 CFR 3715; and the Surface Resources Act of 1955.
- The action is in conformance with the Sonoma-Gerlach Management Framework Plan and is consistent with other Federal agency, state, and local plans to the maximum extent consistent with Federal law and Federal Land Policy Management Act provisions.
- Based on the consultation, coordination, and public involvement that has occurred, it is determined that this is a well informed decision (refer to sections below).
- Based on the EA it is determined that this decision will not result in any unnecessary or undue environmental degradation of public lands and is consistent with other Federal agency, state, and local plans to the maximum extent consistent with Federal law and Federal Land Policy Management Act provisions.

- The selected alternative will not adversely impact any threatened or endangered species or significant scientific, cultural, or historical resources.
- The EA and FONSI support this decision.
- Based on the President's National Energy Policy and Executive Order 13212, the proposed action will not generate any adverse energy impacts or limit energy production and distribution. Therefore, no "Statement of Adverse Energy Impact" is required per WO IM No. 2002-053 and NV IM No. 2002-049.

### **Land Use Plan Conformance**

The proposed action and alternatives described are in conformance with the Sonoma-Gerlach Management Framework Plan, signed July 9, 1982. The proposed action is in conformance with the Land Use Plan (LUP) objective M-1, which states: "Make all public lands and other federally owned minerals available for the exploration and development of mineral and material commodities."

### **Native American Consultation**

On July 23, 2014, the Battle Mountain Band Tribe and Fort McDermitt Tribe were invited to consult with BLM regarding the Proposed Action. Additionally, an email soliciting consultation was sent to the Battle Mountain Band Tribe on July 29, 2014. Through previous consultation (on August 15, 2013 and May 12, 2014) for other NEPA projects, the Battle Mountain Band Tribe has expressed that mining projects not affecting prehistoric cultural sites are generally not of concern. The Proposed Action would not affect any National Register of Historic Places (NRHP) eligible prehistoric cultural sites, and BLM did not receive a response from either Tribe. Based on previous consultation and lack of NRHP eligible prehistoric sites, no Native American religious concerns are expected.

On January 7, 2015, a copy of the Preliminary EA was sent to the Battle Mountain Band Tribe and the Fort McDermitt Tribe. The Tribes were invited to comment on the Preliminary EA and consult with BLM on the project. Again, no response was received from either Tribe, indicating that issues related to Native American religious concerns are believed not to be present.

### **Cooperating Agencies**

Early coordination with the Nevada Department of Wildlife (NDOW) regarding the Proposed Action indicated that there were no major wildlife concerns requiring their dedicated attention, and therefore cooperating agency status was declined. Due to the location and scale of this project, no other potential cooperating agencies were identified.

### **Intergovernmental Partners**

Under the Federal Land Policy and Management Act (FLPMA) of 1976, the BLM's coordination responsibilities include maximizing consistencies with the plans and

policies of other government entities. Coordination with the Nevada Division of Environmental Protection – Bureau of Mining Regulation and Reclamation (BMRR) has occurred throughout the course of the NEPA process. The BMRR often assists the BLM with reviews of the Plan of Operations and Reclamation Plan, baselines reports, and environmental studies such as the Waste Rock Characterization Report. Regular coordination also occurs with the NDOW on all mining projects to determine their level of participation. In the case of the Brooks Project, NDOW declined to participate as a cooperating agency but continued to provide useful information regarding known resources, habitats, and potential wildlife conflicts. The U.S. Fish and Wildlife Service helped determine the scope of baseline survey needs for raptors and Threatened or Endangered species near the Project Area. Similarly, the Nevada Natural Heritage Program provided a list of potential sensitive plants in the vicinity of the Project Area.

## **Public Involvement**

### Scoping

A scoping process was conducted to determine the scope of this environmental analysis. Internal scoping that involved the BLM staff identified resources that may require analysis. The BLM staff then reviewed existing National Environmental Policy Act (NEPA) documents in the project vicinity and began preparing a Determination of NEPA Adequacy (DNA) for the Proposed Action. On September 17, 2014, a draft version of the DNA was released for 30 days for public review and input. Three individual comment letters were received. During and after the 30-day public review period, further internal coordination occurred within BLM. Ultimately, the decision was made to forgo the use of a DNA and prepare the EA. External scoping issues that were identified during the public review of the draft DNA have been considered in this EA.

### Preliminary EA

On January 7, 2015, letters announcing the availability of the Preliminary EA were sent to interested parties and the Preliminary EA was made available for a 15-day public comment period through the BLM ePlanning NEPA Register. In total, three comment letters were received. Comments were received from the Nevada Division of State Lands, the Nevada Division of Environmental Protection – Bureau of Water Pollution Control, and Great Basin Resource Watch.

The Nevada Division of Environmental Protection – Bureau of Water Pollution Control reaffirmed its state permitting requirements with regard to discharges to surface waters or groundwaters of the State. The Nevada Division of State Lands stressed its desire for effective lighting plans that follow “night sky” lighting practices as well as the utilization of building materials, colors and site placement that are compatible with the natural environment. No new buildings are proposed. The environmental concerns for “night sky” lighting have been addressed in the document as follows:

Under the proposed action, environmental protection measures section 2.5.16, the document states, “If lighting is necessary, portable light plants would be used in place of facility-wide overhead lighting. If it would not interfere with safety,

directional lighting would be used. This would include aiming lights downward or towards existing highwalls to avoid directing light to adjacent land. Hooding and shielding of the lights would also be used.” As described in the Proposed Action, operations would not be conducted 24 hours per day, however there may be seasons where lighting is needed during early mornings or evening hours.

Comments received from Great Basin Resource Watch (GBRW) covered the following topics: Public Outreach, Cumulative Impacts Analysis, Air Quality Analysis, Open Pit Reclamation, Acid Rock Drainage, Lack of Development of Meaningful Alternatives, Other Information not Included in the Preliminary EA, and Native American Consultation. The following is a summary of the comments received along with explanations of how the BLM considered each comment and, where applicable, addressed them in finalizing the EA:

#### *Public Outreach*

GBRW expressed that the comment period for the Preliminary EA should have been at least 30 days to allow the public time to review the document and investigate cited sources. Although the Winnemucca District strives to provide a 30-day public review period for EAs, the nature and circumstances surrounding each project may require coordinating and facilitating a shorter commenting window, as was the case with the Brooks Project. The 15-day public review and comment period was in addition to previous outreach conducted for the project which involved the review of a draft DNA. GBRW desired a 30-day review period and requested an extension that was granted for an additional 7 days. GBRW was able to provide comments on the Preliminary EA.

#### *Cumulative Impacts Analysis*

GBRW stated that the Preliminary EA does not address the cumulative effects of the Lone Tree Mine pit lake. GBRW expressed the opinion that the pit lake is within the scope of the Proposed Action and thus, should be analyzed. GBRW contends that because the 1996 Lone Tree Mine Environmental Impact Statement (EIS) inaccurately predicted alkaline water in the Lone Tree Mine pit lake, a new EIS is required now to analyze the impacts of an acidic pit lake. GBRW contended that the BLM has not taken a “hard look” at cumulative impacts associated with the Brooks Project. GBRW contended that the cumulative impact analysis should include the degradation of groundwater in the area surrounding the Proposed Action.

The Proposed Action would have no direct and/or indirect impact on the pit lake at the Lone Tree Mine, nor would the pit lake affect the Proposed Action. Therefore, detailed analysis of the pit lake, including cumulative impact analysis, was not necessary in the EA. The cumulative impact analysis in section 4.2 has considered the incremental impacts that would result from the Proposed Action when combined with the past, present, and reasonably foreseeable future actions. Only resources that were directly or indirectly affected by the Proposed Action are analyzed for cumulative impacts.

Furthermore, similar comments were received on the draft DNA, and section 1.5 addresses the pit lake in saying:

“The BLM understands the importance of maintaining good water quality during and after mining operations. The Lone Tree EIS ROD states, “In the event water quality problems are identified in surface, groundwater, or pit lake water, the Lone Tree Mine would evaluate for potential source, and develop and implement mitigation measures acceptable to NDEP and the BLM.” Poor water quality has been identified in the pit lake at the Lone Tree Mine, and Newmont has remained in compliance with the ROD by treating the lake with lime. This treatment method is reviewed by Newmont, NDEP, and the BLM regularly with the intent of finding the most effective treatment. For this specific Proposed Action, the implementation of the Brooks project would have no effect on the pit lake, nor would the pit lake have an effect on the Brooks project. These actions are not related, and therefore discussion of the pit lake is outside the scope of the proposal.”

#### *Air Quality Analysis*

GBRW expressed concern that the Air Quality analysis was conducted using baseline data from Great Basin National Park and contended that the BLM should use air quality data from the Lone Tree Mine site. Section 3.1.3 of this EA describes the environment that exists at the Lone Tree Mine and the Brooks Project Area. The EA does not rely on air quality data from Great Basin National Park, but rather, explains why the State of Nevada, Bureau of Air Pollution Control uses that data to simulate background concentrations for PM<sub>10</sub> in rural areas throughout Nevada. Data collected at Great Basin National Park is considered to be the best representation of particulate matter concentrations in rural Nevada. Section 4.1.1 describes the site specific analysis that was conducted for the Proposed Action including detailed emissions inventories and project-specific modeling.

#### *Open Pit Reclamation*

GBRW strongly urged the BLM to reconsider the reclamation plan to include backfilling the proposed Brooks open pit and consider this option in the analysis. The Nevada Administrative Code (NAC 519A.250) allows for open pits to be left unreclaimed if they meet certain criteria. Newmont has requested an exemption under NAC 519A.250 (b), (d), and (e). The NDEP has informed the BLM that they intend to grant the exemption to reclaim the proposed Brooks open pit and therefore, detailed analysis for backfilling the pit is not required. Section 2.7 has been modified to provide additional clarification.

#### *Acid Rock Drainage*

GBRW expressed the opinion that the public was not provided with sufficient supporting information to determine the potential for the overburden and interburden to be acid generating. GBRW requested additional data explaining the conclusions that were reached regarding potential acid generation. The Waste Rock Characterization Report for the Brooks Project has been reviewed by technical experts at both BLM and NDEP who concurred with the conclusion that acid rock drainage would not be expected from the Proposed Action. Specifically, the overburden and interburden generated by the Proposed Action would come from the Pennsylvanian to Permian Havallah Sequence



which has a lower sulfur content and higher neutralizing potential than the Valmy formation present in the Lone Tree Mine open pit. The sulfidic Valmy formation, responsible for the acidic pit lake at the Lone Tree Mine, is not present at the Brooks project. The Proposed Action would generate almost entirely oxide overburden and interburden. Furthermore, the overburden and interburden generated by the Proposed Action would not likely be subject to saturated conditions, meaning leachable constituents would not be released in elevated concentrations at the Brooks Project site. Section 2.5.6 has been modified to provide this clarification.

#### *Lack of Development of Meaningful Alternatives*

GBRW asserted that the BLM failed to analyze the direct, indirect, and cumulative impacts of the Brooks Project and did not analyze a reasonable range of alternatives, including the No Action alternative. The BLM analyzed the direct and indirect impacts in section 4.1, and the cumulative impacts were analyzed in section 4.2. Internal and external scoping indicated that the Proposed Action and No Action Alternative constituted a reasonable range of alternatives, and neither alternative generated unresolved environmental conflicts that required the development of another action alternative. Based on comments received on the Preliminary EA, the BLM has added an alternative regarding reclamation of the open pit that was considered but eliminated from detailed analysis in section 2.7.

#### *Other Information not Included in the Preliminary EA*

GBRW commented on the tailings facility at the Lone Tree Mine and expressed concern regarding seepage collection in 2008 and long-term maintenance of the facility. The tailings facility at the Lone Tree Mine is currently inactive, and the Proposed Action does not propose to utilize this facility because the ore is amenable to heap leaching and does not require milling. Therefore, discussion of the tailings facility is outside the scope of this proposal and detailed analysis is not required.

#### *Native American Consultation*

GBRW expressed concern that the BLM had not sufficiently consulted with the Battle Mountain Band Tribe. As described in section 1.5 and section 6.1, the BLM has invited the Battle Mountain Band Tribe and the Fort McDermitt Tribe to consult regarding the Proposed Action on several different occasions. To date, the BLM has not received any comments, questions, or requests to consult regarding this Proposed Action from either Tribe. The BLM has made a good-faith effort to provide opportunity for Native American Consultation. Updates and clarifications have been made to section 1.5 and section 6.1.

#### **Authority**

1. Surface Management Regulations (43 CFR 3809.400 and 43 CFR 3715);
2. Mining Law of 1872 (30 U.S.C. §§ 22-42) as amended;
3. Federal Land Policy and Management Act of 1976 (43 U.S.C. §§ 1701) as amended;

4. Surface Resources Act of 1955;
5. Mining and Mineral Policy Act of 1970.

### **Appeal of the Decision**

A person who wishes to appeal to the Interior Board of Land Appeals must do so under 43 CFR 4.411 and must file in the office of the officer who made the decision (not the board), in writing to James W. Schroeder, Field Manager, Humboldt River Field Office, Winnemucca District, 5100 East Winnemucca Boulevard, Winnemucca, Nevada 89445. A person served with the decision being appealed must transmit the notice of appeal in time to be filed in the office where it is required to be filed within thirty (30) days after the date of service.

The notice of appeal must give the serial number or other identification of the case and may include a statement of reasons for the appeal, a statement of standing if required by § 4.412(b), and any arguments the appellant wishes to make. Attached Form 1842-1 provides additional information regarding filing an appeal.

No extension of time will be granted for filing a notice of appeal. If a notice of appeal is filed after the grace period provided in §4.401(a), the notice of appeal will not be considered and the case will be closed by the officer from whose decision the appeal is taken. If the appeal is filed during the grace period provided in §4.401(a) and the delay in filing is not waived, as provided in that section, the notice of appeal will not be considered and the appeal will be dismissed by the Board.

The appellant shall serve a copy of the notice of appeal and any statements of reason, written arguments, or briefs under §4.413 on each adverse party named in the decision from which the appeal is taken and on the Office of the Solicitor, Pacific Southwest Regional Solicitor, U.S. Department of the Interior, 2800 Cottage Way, Room E-2753, Sacramento, California 95825-1890.

Service must be accompanied by personally serving a copy to the party or by sending the document by registered or certified mail, return receipt requested, to the address of record in the bureau, no later than 15 days after filing the document.

In addition, within thirty (30) days of receipt of this decision you have the right to file a petition for a stay together with your appeal in accordance with the regulations at 43 CFR 4.21. The petition must be served upon the same parties specified above.

Pursuant to 43 CFR 4.47I(c), a petition for stay, if filed, must show sufficient justification based on the following standards:

- 1) The relative harm to the parties if the stay is granted or denied;
- 2) The likelihood of the appellant's success on the merits;

- 3) The likelihood of immediate and irreparable harm if the stay is not granted; and,
- 4) Whether the public interest favors granting the stay.

43 CFR 4.471 (d) provides that the appellant requesting a stay bears the burden of proof to demonstrate that a stay should be granted.

At the conclusion of any document that a party must serve, the party or its representative must sign a written statement certifying that service has been or will be made in accordance with the applicable rules and specifying the date and manner of such service (43 CFR 4.422(c)(2)).

\S\ James W. Schroeder  
James W. Schroeder  
Field Manager  
Humboldt River Field Office

2/13/2015  
Date

Enclosures:  
Finding of No Significant Impact  
Stipulations and Environmental Protection Measures  
Appeal Form 1842-1

## **Stipulations and Environmental Protection Measures**

### **Newmont Mining Corporation Lone Tree Mine Expansion – Brooks Project Environmental Assessment DOI-BLM-NV-W010-2014-0034-EA**

#### **Stipulations**

The Authorized Officer has decided that the following stipulations must be adhered to for any authorization implementing the Proposed Action. In addition to the stipulations, the operator has committed to the Environmental Protection Measures outlined below.

#### **Special Status Plants**

The operator shall prevent disturbance to Areas 4, 5, and 6 of the West and Northwest Overburden/Interburden Storage Areas (OISA) with known potential habitat for Margaret rushy milkvetch until a special status plant survey can be performed. Areas 4, 5, and 6 are depicted on Figure 14 of the EA. Additionally, no exploration disturbance will be authorized in potential habitat for Margaret rushy milkvetch until a special status plant survey can be performed. Of the three OISAs proposed, two contain potential habitat for the Margaret rushy milkvetch. The proposed West and Northwest OISAs and their access routes include 42 acres of potential habitat, comprising 44 percent of these facilities.

The plant survey of the West and Northwest OISAs (Areas 4, 5, and 6) shall be conducted by a qualified botanist for Margaret rushy milkvetch during its flowering period (May – June). If special status plant species are present, they shall be avoided by a buffer of 50 feet and the operator shall collect seeds and/or transplant special status plant species outside of disturbance areas in coordination with BLM. Collected seeds shall be stored in a seed bank and germinated for eventual planting. If a transplant location is not determined prior to the completion of this analysis, the prospective transplant location would be evaluated under NEPA once an appropriate location has been identified.

Approximately three acres of potential Margaret rushy milkvetch habitat occur along the proposed haul road in Areas 1, 2, and 3. The haul road would be necessary for site preparation and development of the proposed facilities. In the event the haul road needs to be constructed before the flowering period for Margaret rushy milkvetch, special status plant surveys would not be required on the potential habitat located in Areas 1, 2, and 3, as depicted on Figure 14 of the EA. This would ensure that site preparation and development is not unreasonably hindered. The disturbance of approximately three acres of potential Margaret rushy milkvetch habitat would represent a loss of 1.8 percent of the total habitat available in the Project Area. If the haul road is not needed prior to the flowering period, surveys shall be conducted as described for Areas 4, 5, and 6.

### **Sensitive Small Mammals**

Seven to ten days prior to vegetation removing activities (including exploration), vegetation in proposed disturbance areas shall be mowed to a height of eight to twelve inches above ground to create less desirable habitat conditions and to encourage wildlife species, including the pygmy rabbit, dark kangaroo mouse, and Preble's shrew, to vacate the disturbance areas, thus reducing the risk of mortality to these species. Areas where vegetation is naturally less than 12 inches may be excluded from this requirement with approval from the authorized officer, based on field verification from BLM staff. Mowing in potential special status plant habitat shall not occur prior to completion of special status plant surveys, as described in the special status plant stipulation.

If mowing occurs during the migratory bird breeding season (March 1 – August 31), a migratory bird clearance survey (including burrowing owls) will be required prior to mowing as outlined in the Operational and Performance Standards and Environmental Protection Measures section in chapter 2.5.12 of the EA. Mowing after the migratory bird clearance survey, and within seven to ten days prior to surface disturbance, will allow the applicant to conduct necessary bird clearance surveys and may also allow pygmy rabbit, dark kangaroo mouse, and Preble's shrew to relocate outside of the disturbance areas.

If mowing occurs outside of the migratory bird breeding season (September 1 – February 28), a western burrowing owl clearance survey will be required, as described in the burrowing owl stipulation.

### **Western Burrowing Owl**

To avoid potential impacts to burrowing owls, a burrowing owl survey shall be conducted by a qualified biologist prior to ground disturbance, any time of the year due to some burrowing owls being year-round residents that do not migrate. Surveys must be conducted no more than 10 days and no less than 3 days prior to initiation of disturbance. Surveys must follow established BLM standards and protocols, and should be approved by the BLM prior to being implemented. If active burrows are located, the BLM must be notified immediately and a buffer of 500 meters, or line of sight (the lesser of the two), shall be placed around the burrowing owl's burrow until it vacates its burrow. If active burrows are located during the breeding season (March 1 – August 31), the active burrow shall not be disturbed until after the breeding season or the burrow is no longer active. If active burrows are located during the non-breeding season, a one-way door shall be installed in burrow openings to permanently exclude burrowing owls and close burrows after verifying burrows are empty based on site monitoring by a qualified biologist.

Do not harass or evict the burrowing owl out of the burrow, but wait until it vacates the burrow on its own and then implement the closing of the burrow openings. If a burrow needs to be permanently closed, create one passive relocation site/artificial burrow for every active burrow closed, in coordination with the BLM. Artificial burrows shall be located in the nearest suitable habitat within the Project Area, but outside of the disturbance area, to encourage the burrowing owls to use the artificial burrows. This would reduce the risk of burrowing owl mortality from the surface disturbing activities from the Proposed Action. If no active burrows are present in the area surveyed,

implementation of the project shall commence within 10 days of survey completion in order to avoid the need for a subsequent burrowing owl survey.

### **Environmental Protection Measures Committed to by the Operator**

Newmont Mining Corporation has committed to the following environmental protection measures to prevent unnecessary and undue environmental degradation during construction, operation, and reclamation activities of the Proposed Action. The measures are derived from the general requirements established in 43 CFR 3809, as well as other water, air quality, and environmental protection regulations.

#### **Air Quality**

Appropriate air quality permits would be obtained from the NDEP Bureau of Air Pollution Control (BAPC) for the Brooks project facilities and land disturbances. As per BAPC regulations, the Brooks project air quality operating permit must be authorized by the BAPC prior to project commissioning. The Brooks project would comply with all applicable air quality regulations, including the control of fugitive dust from ground surface disturbances and roads.

The generation of fugitive dust from mining, including such activities as drilling, blasting, excavating, loading, hauling and waste rock disposal, would be controlled by BMPs in conformance with the Handbook of Best Management Practices (Nevada State Conservation Commission 1994). Committed air quality practices would include dust control for mine unit operations as described by the BAPC-required Fugitive Dust Control Plan. In general, the Fugitive Dust Control Plan would provide for water application of haul roads and other disturbed areas, chemical dust suppressant application (such as magnesium chloride) where appropriate, and other dust control measures as per accepted and reasonable industry practice. Also, disturbed areas would be seeded with an interim seed mix to minimize fugitive dust emissions from surfaces without vegetation, where appropriate.

#### **Cultural Resources**

Any cultural resource discovered by Newmont, or any person working on their behalf, during the course of activities on federal land would be immediately reported to the authorized officer by telephone, with written confirmation. Newmont would suspend all operations in the immediate area of such discovery and protect it until an evaluation of the discovery can be made by the authorized officer. This evaluation would determine the significance of the discovery and what mitigation measures would be necessary to allow activities to proceed. Newmont would be responsible for the cost of evaluation and mitigation. Operations may resume only upon written authorization to proceed from the authorized officer.

Additionally, the operator, or any person working on their behalf, would not knowingly remove, disturb, alter, or destroy any scientifically important cultural resources such as a historical or archaeological site, structure, building, object or artifact that qualify for

listing on the National Register of Historic Places (NRHP) or have not been evaluated for listing on the National Register.

Newmont must notify the authorized officer, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary objects, sacred objects, or objects of cultural patrimony (as defined at 43 CFR 10.2). In the event that a discovery is found, Newmont must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

### **Paleontological Resources**

In the event that previously undiscovered paleontological resources are discovered in the performance of any surface disturbing activities, the item(s) or condition(s) would be left intact and immediately brought to the attention of the authorized officer of the BLM. If significant paleontological resources are found, avoidance, recordation, and/or data recovery would be required.

### **Waters of the State**

There are no perennial streams in the immediate vicinity of the Project or within 0.5 mile downgradient of the Project. The nearest named water body to the drainages is Herrin Slough, located on the east side of Interstate 80, approximately 3.9 miles northeast of the Project. Herrin Slough ultimately drains into the Humboldt River which is located approximately 5 miles northeast of the Project. The Lone Tree Pit Lake exists in Sections 11, 13, and 14, T34N, R42E MDBM. There are no other lakes in the immediate vicinity of the Project or within 0.5 mile downgradient of the Project.

As described in the Lone Tree Mine Expansion, Preliminary Jurisdictional Determination Report (ARCADIS 2013a), a survey for potential aquatic resources in the Project Area was completed in June 2013. During the survey, four desert drainage swales were identified within the Project Area. The Brooks project is hydrologically precluded from the watershed because the four drainages ultimately terminate on the alkali flat north of the Project Area. No wetlands were identified within the Project Area. There is no direct flow from the project to Waters of the United States, including perennial streams waters or traditionally navigable waters.

### **Erosion and Sediment Control**

The Lone Tree Mine is located in a region that receives little rainfall. Potential evapotranspiration greatly exceeds precipitation at the mine. BMPs would be used to limit erosion and reduce sediment in precipitation runoff from project facilities and disturbed areas during construction, operations, and initial stages of reclamation. BMPs may include, but are not limited to, diversion and routing of storm water using accepted engineering practices, such as diversion ditches, and the placement of erosion control devices, such as sediment traps, and rock and gravel cover.

Revegetation of disturbed areas would reduce the potential for wind and water erosion. Following construction activities, areas such as cut and fill embankments and growth media stockpiles would be seeded as soon as practical and safe. Concurrent reclamation

would be maximized to the extent practicable to accelerate revegetation of disturbed areas. All sediment and erosion control measures would be inspected periodically, and repairs performed as needed.

### **Acid Rock Drainage**

The Project waste rock is net neutralizing and would not generate acid (Newmont 2013e). The overburden and interburden generated by the Proposed Action would come from the Pennsylvanian to Permian Havallah Sequence which has a lower sulfur content and higher neutralizing potential than the Valmy formation present in the Lone Tree Mine open pit. The sulfidic Valmy formation, responsible for the acidic pit lake at the Lone Tree Mine, is not present at the Brooks Project. When compared to oxide waste rock acid-base accounting results from nearby Valmy and Lone Tree Mines, the Brooks Project waste rock has a lower sulfur content and higher neutralizing potential. Leachable constituents are present in very low concentrations, and would release only under saturated conditions rather than as a timed release. Because the overburden and interburden generated by the Proposed Action would not likely be subject to saturated conditions, leachable constituents would not be released in elevated concentrations at the Brooks Project site. As the materials associated with the project do not contain any significant sulfide mineralization, there would be no oxidation products to release over time beyond those released with the initial flush.

### **Hazardous Materials**

The term “hazardous materials” is defined in 49 CFR 171.8 and 172.101. Hazardous substances are defined in 15 USCS 1261, 49 CFR 302.4, and the Superfund Amendments and Reauthorization Act Title III. Hazardous materials would be transported, stored, and used in accordance with federal, state, and local regulations, as well as in compliance with the Materials Handling Plan and the Emergency Release Response and Contingency Plan described in the Lone Tree Mine Operating Plan (Newmont 2013a) and the Lone Tree Contingency and Emergency Response Plan (Newmont 2012a).

Hazardous materials would be transported to the project by U.S. Department of Transportation (DOT)-regulated transporters and stored on-site in DOT-approved containers. Employees would be trained in the proper transportation, use, and disposal of hazardous materials. All hazardous substances are handled in accordance with applicable MSHA regulations and as recommended on the manufacturer's Material Safety Data Sheets.

### **Solid and Hazardous Waste**

Solid and hazardous waste management at the Brooks project would follow the protocols described in the existing Lone Tree Mine Solid and Hazardous Waste Management Plan (Newmont 1996). Employee training would outline appropriate disposal practices, which includes the allowable wastes that can be placed in a landfill, management of used filters, oily rags, fluorescent light bulbs, aerosol cans, and other regulated substances. There would not be a landfill in the Project Area and all solid wastes would be disposed off-site.



Hazardous waste generation, treatment and disposal are regulated by the Federal Resource Conservation and Recovery Act (RCRA), 40 CFR, 260-270. Hazardous waste management at the Brooks project would comply with the existing Lone Tree Mine plans. In compliance with 40 CFR Part Subpart D (265.50-.56) Contingency Plan and Emergency Procedures, the Lone Tree Mine has developed a Contingency Plan and Emergency Procedures Plan as part of the Lone Tree Mine Operating Plan (Newmont 2013a) for potential accidents involving hazardous waste at the mine. In addition, the Project would comply with the Lone Tree Mine Spill Prevention, Control and Countermeasures Plan (Newmont 2011b) and the Petroleum Contaminated Soils Management Plan (Newmont 2013c). Used solvent, liquids drained from aerosol cans, accumulations of mercury fluorescent lights, and used antifreeze may be regulated by RCRA. Under RCRA, the Lone Tree Mine is already considered a “large quantity generator”. As such, all of the necessary facilities and infrastructure for large quantity generators are in place. The Proposed Action would not change the current RCRA designation.

Newmont has a waste minimization program to evaluate hazardous substances used on the mine property. When possible, alternative products that generate no waste or solid waste, rather than RCRA wastes would be used. Hazardous wastes generated at the Brooks project would be transported to permitted waste disposal facilities by licensed waste haulers. When practical, the wastes would be sent to recycling facilities.

#### **Spill Prevention, Control and Countermeasures Plan**

Operations at the Brooks project would be conducted in compliance with 40 CFR Part 112 and in accordance with the Lone Tree Mine Spill Prevention, Control and Countermeasure Plan (Newmont 2011b). The Spill Prevention, Control and Countermeasure (SPCC) Plan would be amended for the project. Inadvertent spills are anticipated to be contained within secondary containment.

Releases of hazardous materials would be contained, mitigated, and reported in accordance with the SPCC Plan. Spill containment and cleanup equipment would be available at the project. For on-site spills, the procedures outlined in the SPCC Plan would be used to respond to petroleum and fuel spills. Implementation of the prevention, containment, and clean-up measures in the SPCC Plan would minimize the potential for related impacts to soils, vegetation, wildlife, and water resources.

#### **Monitoring**

Environmental monitoring at the Brooks project would include revegetation and water quality monitoring for groundwater. Revegetation monitoring is addressed in Section 3 of this POO amendment. A plan for groundwater monitoring was developed for the Lone Tree Mine WPCP (Permit #NEV90058). Monitoring wells M/O 21-1 and M/O 19-1 are the closest water-level measurement points to the Brooks Pit and OISAs.

There are no surface water bodies within 0.5 mile down gradient of the disturbance area. Per the Stormwater Pollution Prevention Plan - Lone Tree Mine (Newmont 2013b), storm water discharges from the mine area do not enter Waters of the United States; therefore,

there are no storm water monitoring requirements under the General Permit (NVR300000). The existing SWPPP would be amended for the Brooks project.

**Growth Media and Cover Salvage and Storage**

Salvageable growth media from the Brooks project surface disturbance would be stockpiled below the base elevation of the OISAs and the Brooks Pit. The haul road berms would consist of growth media. Available growth media would be salvaged for reclamation. Section 2.4.3 presents further discussion on growth media salvage. Growth media would consist of soils and alluvium stripped prior to surface disturbance activities. Any growth media remaining in the stockpile for one or more planting seasons would be seeded with an interim seed mix to stabilize the material, reduce erosion, and minimize the establishment of undesirable weeds.

**Wildlife, Migratory Birds and Livestock**

During construction and operations, land clearing and surface disturbance would be timed to prevent destruction of active bird nests or young of birds during the avian breeding season (March 1 through August 31, annually in accordance with the BLM Winnemucca District policies to comply with the Migratory Bird Treaty Act [MBTA]). If surface disturbing activities are unavoidable during the avian breeding and nesting season, Newmont would have a qualified biologist survey areas proposed for disturbance to determine the presence of active nests immediately prior to the disturbance. If active nests are located, the BLM biologist would be notified immediately and appropriate protection measures which may include avoidance or restriction of activities would be established. If no active nests are present in the area surveyed, implementation of the project should commence within 10 days of survey completion. Operators would be trained to monitor the mining and process areas for the presence of larger wildlife such as deer. Newmont would establish wildlife protection policies that would prohibit the feeding or harassment of wildlife.

Project-related traffic would observe prudent speed limits to protect wildlife and livestock, as well as to enhance public safety and minimize dust emissions. The Project perimeter would be fenced according to BLM Manual Handbook H-1741-1 for antelope specifications in order to keep wildlife and livestock out of the mine area. The perimeter fence would be monitored regularly, and repairs made as needed.

**Noxious Weeds and Invasive Nonnative Species**

Noxious and invasive nonnative species management would follow procedures in place at Lone Tree Mine for noxious weed management. Newmont recognizes the economic and environmental impact that can result from the establishment of noxious weeds and has committed to a proactive approach to weed control. A noxious weed monitoring and control plan has been developed for the Lone Tree Mine. The plan would be in place throughout operations. The plan contains risk assessment, management strategies, provisions for annual monitoring and treatment evaluation, and provisions for treatment. Annual weed surveys would be conducted in order to direct weed control efforts. The results from annual monitoring would be the basis for updating the plan and developing annual treatment programs. Monitoring for infestations and weed control efforts would

continue until reclamation is complete in order to minimize the potential for weed invasion.

### **Fire Protection Measures**

All reasonable measures would be taken to prevent and suppress fires in the Project Area. The Brooks project would operate in conformance with applicable state and federal fire laws and regulations, including MSHA safety regulations (30 CFR 1-199), State Fire Marshal standards, and the Lone Tree Contingency and Emergency Response Plan (Newmont 2012a). All equipment would be properly muffled and equipped with suitable and necessary fire suppression equipment, such as fire extinguishers and hand tools.

Fire protection for the project would be accomplished using the existing Lone Tree Mine protocols. The primary method of fire suppression for the Lone Tree Mine is by the large water trucks used for dust suppression in support of the daily mining operations. Fresh water for fire suppression would be supplied to the water trucks via existing spigots at the Lone Tree Mine fresh water tank. A loaded water truck, with operator, is readily available to minimize the emergency response time.

### **Public Safety Measures**

Public safety would be maintained throughout the life of the Brooks project. All equipment and other facilities would be maintained in a safe and orderly manner.

Newmont's operations are subject to the Federal Mine Safety and Health Act of 1977, which sets forth mandatory safety and health standards for metal mines, including open pit mines. The purpose of the standards is the protection of life, promotion of health and safety, and prevention of accidents. Regulations issued under MSHA are codified under 30 CFR Subchapter N, Part 56.

In the event that any existing roads in the Project Area are severely damaged as a result of project activities, Newmont would return them as close as possible to their original condition.

### **Visual Resources**

The following environmental protection measures would be incorporated into the Proposed Action to avoid impacts to visual resources including night skies:

If lighting is necessary, portable light plants would be used in place of facility-wide overhead lighting. If it would not interfere with safety, directional lighting would be used. This would include aiming lights downward or towards existing highwalls to avoid directing light to adjacent land. Hooding and shielding of the lights would also be used.

### **Additional Mitigation Measures from the Lone Tree EIS ROD**

The mitigation measures listed below are taken from the ROD for the Lone Tree Mine Final EIS, dated October 15, 1996, and are specifically applicable to this Proposed Action. Be advised, not all details of the mitigation measures are applicable to this action, however the mitigation measures are provided in their entirety. Some examples

of details that are not applicable for this proposal include actions on private land, descriptions of water quality, tailing impoundment and leach pads. These items do not pertain to the current Proposed Action since there are no private lands, water quality, tailings impoundment or heap leach issues associated with this action. Additionally, when referencing the operator, Santa Fe Pacific Gold (a.k.a. SFPG) has been replaced with Newmont. The relevant mitigation measures are:

### **SOILS**

Impacts from compaction are to be reduced by ripping and scarifying oxide overburden after placement.

In order to reduce soil loss and uncontrolled rilling and gulying on overburden faces, Newmont shall contour the tops of overburden disposal facilities to direct runoff inward on each bench or down dump faces into existing drainage bottoms (if water quality is acceptable).

Varying slope gradients are to be constructed on overburden disposal and heap leach areas to create more drainage diversity.

Newmont shall stabilize growth medium stockpiles by revegetating with an appropriate [BLM-approved] seed mixture.

### **RECREATION**

Following the completion of mining operations, Newmont shall exclude access and mitigate safety hazards posed by pit walls by reclaiming all pit access roads. On private land, a 4-strand barbed wire fence will be constructed around the perimeter of the open pit approximately 100 feet back from the highwall edge. On public land, a berm will be constructed around the perimeter of the open pit approximately 100 feet back from the highwall edge. The fence and berm shall be posted with warning signs spaced every 2000 feet. The signs would be fabricated of metal warning visitors of unstable conditions and hazards. Signs shall also be installed warning the public of water quality conditions.

### **TERRESTRIAL WILDLIFE**

Reclamation of overburden disposal areas and leach pads will incorporate the following measures which are intended to enhance the post mining wildlife habitat values of these sites.

- a. Individual boulders, rock piles, and areas resembling rock slides will be installed to provide diversity of habitat and perching, feeding, and loafing areas for resident raptor, small mammal, and reptile species inhabiting these sites. The location, distribution, size, and density of these areas will be determined with consultation from the BLM.
- b. During reclamation, surfaces of both side slopes and tops of overburden areas, heap leach pads, and tailings facility will be graded to incorporate a series of swales and irregularities in the contour surface, generating micro climates for post mining flora.

## **AIR RESOURCES**

Fugitive dust from all disturbed areas and unpaved roads during the mine life would be controlled using water sprays, chemical stabilization or other dust controls approved by the Nevada Division of Environmental Protection (NDEP).

## **GEOLOGY**

Overall side slopes of the overburden disposal areas will be 3H:1V. Reclamation goals for the overburden dumps will include ensuring slope stability, design more natural appearing slopes blending with surrounding topography, and minimize erosion and excessive soil loss.

All overburden and interburden disposal areas, tailings impoundment, and heap leach pads [at the Lone Tree Mine] are to be designed, constructed and maintained ensuring stability during and post mining. Newmont shall apply mitigating measures for slump failures of overburden disposal areas, tailings impoundment and leach pads, including monitoring for slump failures of facilities during mining operations. In the event such monitoring identifies advanced signs of slope or slope failure, Newmont shall take remedial action to alleviate the problem, including performing the necessary earthwork to stabilize slump or slope failure and establish appropriate drainage, to deter unstable conditions in a manner acceptable to the BLM authorized officer.

## **VISUAL**

To eliminate flat surfaces on overburden dumps and heap leach pads, the surfaces shall be recontoured and a sufficient number of large boulders of rock shall be placed on the tops of these facilities.

The long straight profiles of the overburden dumps shall be broken up by creating pseudo-drainages along the faces of the dumps.

Edges of overburden embankments will be rounded to reduce angular appearance and soften edges.

## **VEGETATION**

Revegetation success standards are to be determined by attachment B of the “Nevada Interim Standards for Successful Revegetation.”

Disturbed and reclaimed areas shall be monitored to determine if undesirable species are becoming established. If weeds become a problem, a control plan shall be developed and approved by the BLM.

The operator shall be responsible for controlling all noxious weeds and other undesirable invading plant species in disturbed areas until revegetation activities have been determined successful and signed off by the BLM authorized officer. The operator shall obtain approval from the authorized officer prior to any and all

application of herbicide. All seed shall be tested for noxious, poisonous, or prohibited plant species and the test results submitted to and approved by the BLM, unless certified weed free seed is procured.

### **CULTURAL**

Newmont shall comply with requirements of the Surface Management Regulations 43 CFR 3809.420(b)(8) pertaining to cultural and paleontological resources. Project workers shall be instructed in cultural resource protection laws and associated responsibilities. If any new cultural resource sites not previously identified in the cultural resource inventories are encountered during facility construction and or operational activities, work shall stop at the particular location and Newmont shall notify the Winnemucca District of the BLM. Work at the location shall be deferred until the BLM Winnemucca District office directs Newmont on how to proceed.

Newmont must notify the authorized officer, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary objects, sacred objects, or objects of cultural patrimony (as defined at 43 CFR 10.2). In the event that a discovery is found, Newmont must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.